



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/635,919	08/06/2003	Claudius Zeiler	A8130.0659/P659	8849
24998 7590 08/30/2010 DICKSTEIN SHAPIRO LLP 1825 EYE STREET NW Washington, DC 20006-5403				
EXAMINER NELSON, CHRISTINE L.				
ART UNIT		PAPER NUMBER		
3775				
MAIL DATE		DELIVERY MODE		
08/30/2010		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/635,919

**Applicant(s)**

ZEILER ET AL.

**Examiner**

CHRISTINE L. NELSON

**Art Unit**

3775

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 17-19, 21, 22 and 29-34 is/are pending in the application.
- 4a) Of the above claim(s) 17-19, 21 and 22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 29-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/GS/US)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

## DETAILED ACTION

### *Response to Arguments*

Applicant's arguments filed June 18, 2010 have been fully considered but they are not persuasive.

In response to applicant's argument that there is no teaching, suggestion, or motivation to combine the references, the examiner recognizes that obviousness may be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988), *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992), and *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007). In this case, the combination of Esser (US Pat. No. 6,096,040) in view of Bailey (US Pat. No. 5,607,430) is reasonable.

Regarding the arguments on page 8, paragraph 2, that the Esser bone plate hole arrangement would "discourage the inclusion of any addition[al] fastening mechanisms, absent a recognition in the art that Esser's fastening technique is deficient or defective." The examiner never stated that the fastening technique of Esser was deficient, merely that there would be no reason not to re-enforce the holding structure of Esser with the boss and cable arrangement of Bailey. It is known in the art to use more than one type of fixation system at a time and the combination suggested would supply additional

fixation, or a "back-up" system, should part of the Esser fixation fail, or if the bone configuration is such that additional re-enforcement would be helpful.

In response to the argument on page 9, second paragraph, that "Bailey would appear to teach away from using bosses on head sections of bone plates," simply because Bailey does not specifically show bosses used on the head section in the figures, does not indicate that the bosses of Bailey *could not* be used on the head section of a bone. If well positioned, a boss and fastener that seated between tubercles or spanning the neck of a bone, may provide valuable additional compression and stability for healing.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 29 – 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Esser (US Patent Number 6,096,040) in view of Bailey (US Patent Number 5,607,430).

Regarding Claim 29, Esser discloses a plate member having an edge defining a head-end portion shaped to bear against a surface of a bone and a shaft-end portion shaped to bear against a surface of a bone (Figures 3-5 and column 5, lines 52-64), the shaft-end portion being narrower along a lateral direction than the head-end portion (Figure 3), and the plate member edge delineating a bone facing surface to bear against

the bone and an opposing side surface facing away from the bone (Figures 3-5). Esser further discloses a plurality of holes for bone screws on each of the head-end portion and the shaft-end portion for fixing the plate member to the bone surfaces (Figure 2 and column 5, lines 32-36).

Esser does not disclose at least one discrete receiving member protruding from the opposing side surface, located at the head-end portion, and proximate to the edge, each member defining a substantially circular and circumferentially enclosed aperture through which flexible members may be passed through and tightened after the plate member has been secured to the bone surfaces, an edge circumference of each aperture having a distal curved section spaced further from the opposing side surface than a proximal curve section. However, Bailey does teach at least one discrete receiving member protruding from the opposing side surface (Figure 1, 18 "bosses"), located at the head-end portion, and proximate to the edge, each member defining a substantially circular and circumferentially enclosed aperture (embodiment in Figure 7) through which flexible members may be passed through and tightened after the plate member has been secured to the bone surfaces (Column 4, lines 6-23), an edge circumference of each aperture having a distal curved section spaced further from the opposing side surface than a proximal curve section (Figure 3, 22 "openings").

It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the "bosses" for holding a cable in place to further secure a bone plate as disclosed in Bailey with the shape and configuration of the bone plate for use with long bones as disclosed in Esser. The adaption of bosses to hold

cabling and further secure a bone plate is applicable to any bone plate where additional fixation support would be beneficial.

Regarding Claims 30 and 33, Esser discloses an implant plate with a thickness of the plate member between 0.8 and 3.5 mm with a substantially uniform thickness between 0.5 and 6.5mm (Column 6, lines 4-6).

Regarding Claim 31, Esser discloses an implant plate where the plate member is of titanium alloy (Column 6, lines 12-13).

Regarding Claim 32, Esser discloses an implant plate where the plate member has a slight curvature to the head-end portion and the shaft-end portion to bear against the outer surfaces of the bone (Column 5, lines 52-64).

Regarding Claim 34, Esser does not disclose a plurality of discrete receiving members each protruding from the opposing side surface and located at the head-end portion, proximate to the edge. However, Bailey teaches a plurality of discrete receiving members each protruding from the opposing side surface and located at the head-end portion, proximate to the edge (Figure 3). It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the "bosses" for holding a cable in place to further secure a bone plate as disclosed in Bailey with the shape and configuration of the bone plate for use with long bones as disclosed in Esser. The adaption of bosses to hold cabling and further secure a bone plate is applicable to any bone plate where additional fixation support would be beneficial. A plurality of bosses would further enhance the securing ability of the invention.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTINE L. NELSON whose telephone number is (571)270-5368. The examiner can normally be reached on Monday through Friday 7:30 to 5:00 - first Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas C. Barrett can be reached on (571)272-4746. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/CHRISTINE L. NELSON/  
Examiner, Art Unit 3775

/Thomas C. Barrett/  
Supervisory Patent Examiner, Art  
Unit 3775